REMARKS

This Response is in response to the Office Action mailed August 17, 2010.

On July 28, 2010 a telephone interview with the Examiner was conducted, during which it was agreed that the previously-mailed final office action would be vacated because it presented a new grounds of rejection where, in response to a prior, non-final office action, the applicant had not amended the claims but instead had pointed out that the claims as written distinguished over the prior art citer in that earlier office action.

The Examiner rejects claims 23-25, 27, 29, 33, and 34 under 35 U.S.C. § 103(a) as being unpatentable over Gvozdanovic et al., U.S. Patent No. 6,660,720 in view of Seo, U.S. Patent No. 6,959,448, Gross, U.S. Patent No. 7,032,020, and in further view of Fang, U.S. Patent Application Pub. No. 2007/0064722. The Examiner rejected each of claims 28, 30, and 31 under 35 U.S.C. § 103(a) as being unpatentable over respective combinations, each citing Gvozdanovic, Seo, Fang, and Gross, respectively. The Examiner rejected claims 35-37, 40, and 44 under 35 U.S.C. § 103(a) as being unpatentable over Gvozdanovic and Gross. The Examiner rejected claims 39, 41, 42, and 45 under 35 U.S.C. § 103(a) as being unpatentable over respective combinations, each including Gvozdanovic and Gross as the primary and secondary references, respectively.

The applicant believes that the Examiner's rejection is improper for two distinct reasons, as explained in more detail below. First, the newly-cited Gross patent merely describes a procedure for sending a plurality of test packets in short bursts between special "smart nodes" installed between a network device and a network router, where the receipt time of the test packets is used to measure bandwidth capacity. The present claims, in contrast, measure bandwidth using packets of the data that the application

sends to a receiver for presentation to a person, i.e. the present claims obviates any necessity for the use of test packets. *See, e.g.* Specification at page 40 lines 29-30 ("It may be observed that the packets are the actual vide signal and not merely additional test traffic imposed on the network." Second, the primary reference, Gvozdanovic, teaches against the claimed combination in that it requires that the high limit on voice traffic over a network be capped such that it does not overload the network connection.

With respect to the first of these arguments, independent claim 23 recites the limitation of "a first plurality of packets of said data for presentation to a viewer at said receiver." The claim goes on to define a "second plurality of packets" as "a subset of said first plurality of packets" meaning that the second plurality of packets must also be "for presentation to a viewer at said receiver." Claim 1 indicates that the second plurality of packets are transmitted as an average rate higher than that of the larger set of data to which it belongs, and that the bandwidth of the connection between the transmitter and the receiver is estimated based on arrival times of only those packets in the "second" plurality,

Gross discloses a system that tests bandwidth between network segments using special "smart nodes" (SN) defined as "stand-alone boxes . . . added to the network system 100, being placed in-line between a hub and a network device." *See* Gross at col. 4 lines 8-14. These smart nodes are linked to a central server and programmed to supply test packet profiles (defined as "one or more short packet bursts or one or more packet streams") upon command of the server "to other select SN's at precise times." *See Id.* at col. 3 lines 43-44 and col. 4 lines 58-60. Gross clearly indicates that these test packets are not application data:

> *Traffic other than the test packet bursts used in the test should not be present during the test.* Optionally, to avoid causing excessive disruption in normal network traffic, all burst traffic may be marked as high priority using

> the IP header TOS field for distinction, so that it gets preferred treatment. In that case, the only restriction is that *normal network traffic be confined to best effort*. However, *if it is determined that other traffic will not be present*, i.e. there is no normal best effort traffic nor any high priority traffic, *the packet burst traffic does not need to be marked as priority packets.*

Id. at col. 6 lines 8-19 (emphasis added).

Thus, Gross fails to teach modifying Gvozdanovic to transmit a subset of the larger set of voice data packets (what the Examiner indicates is the claimed "first plurality of packets") at a burst to measure bandwidth using only the burst of voice data. Gross merely teaches a smart node that sends additional test packets that measure bandwidth.

This is a significant distinction because, as taught by Gvozdanovic, packets of voice data could not be sent in the bursts as taught by Gross. Specifically, Gvozdanovic teaches a shared network that sends both voice and data traffic, such as voice-over IP. Specifically, Gvozdanovic teaches that a voice application should enforce parameters, including a sustained cell rate and a peak cell rate (what the Examiner refers to as the claimed first and second average rates, respectively), because otherwise, disruptions in traffic would result from the variable bit rate caused by a voice application that suppresses silence so as to free up bandwidth rather than encode that silence. *See* Gvozdanovic at col. 5 lines 22-45; *Id.* at col. 1 lines 23-48. Essentially, to make the communication network for voice-over IP more efficient, silence is suppressed to free up bandwidth, and the voice signal is "shaped" to its peak cell rate to further increase bandwidth for Internet data traffic. Because silence is non-deterministic, however, unpredicted periods of continuous speech by multiple users can overload the network. *See* Gvozdanovic at col. 4 lines 33-39.

The defined maximum peak cell rate for individual applications, however, cannot be ordered by a central server. In other words, an inherent aspect of the disclosure of

Gvozdanovic is that the network has no means to drive voice traffic to the peak cell rate, but can only enforce it as a limit when it is reached or exceeded by an application, i.e. a server has no means of forcing multiple persons to speak at once so as to attain the PCR. Yet, for the teachings of Gross to be used to estimate bandwidth from a voice signals deposited into the network at the peak cell rate, the network must be able to *cause* the test packets to be sent at a rate that overflows the capacity of a link. This is a fundamental incompatibility between Gross and the primary reference, Gvozdanovic.

For each of these reasons, claims 23-25, 27-31, 33, and 34 patentably distinguish over the cited prior art.

Independent claim 34 recites the limitations of "defining a transmission rate to transmit a plurality of packets of said contiguous sequence wherein said transmission rate is greater than the average rate for transmitting said data to a receiver" and "transmitting said plurality of packets of said data over a wireless interconnection to a receiver wherein all packets contain at least one of audio data and video data." Therefore claims 35-37, 39-42, 44, and 45 are distinguished over the cited prior art for the same reasons as is claim 23.

In view of the foregoing amendments and remarks, the applicant requests reconsideration and allowance of claims 23-25, 27-31, 33-37, and 39-45.

Applicant submits that no fees are required for entry of this Response. If any fees are deemed necessary, however, the Commissioner is authorized to charge the requisite fee to Deposit Account No. 03-1550.

Respectfully submitted,

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By_____

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